

# PATENT COOPERATION TREATY

**PCT**

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Crystal Plaza 2  
Washington, DC 20231  
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

**Date of mailing** (day/month/year)

08 July 1999 (08.07.99)

**International application No.**

PCT/IE98/00103

**Applicant's or agent's file reference**

TELL04/C/WO

**International filing date** (day/month/year)

15 December 1998 (15.12.98)

**Priority date** (day/month/year)

15 December 1997 (15.12.97)

**Applicant**

O'BRIEN, Raymond et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International Preliminary Examining Authority on:

02 June 1999 (02.06.99)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

**BEST AVAILABLE COPY**

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

S. Mafla

Telephone No.: (41-22) 338.83.38

## PCT,

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>TELL04/C/W0</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/IE 98/ 00103</b>	International filing date (day/month/year) <b>15/12/1998</b>	(Earliest) Priority Date (day/month/year) <b>15/12/1997</b>
Applicant <b>TELLABS RESEARCH LIMITED et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

1b



None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/IE 98/00103

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04Q11/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 614 324 A (NIPPON ELECTRIC CO) 7 September 1994	1,2,4,5
Y	see column 5, line 54 - column 7, line 36; figures 1,2,9,10 see column 9, line 16 - column 10, line 2 see column 10, line 6 - column 11, line 21 see column 12, line 58 - column 13, line 44	3,9,17
Y	US 5 414 707 A (JOHNSTON CESAR A ET AL) 9 May 1995 see column 1, line 64 - column 2, line 29	3,9
Y	US 5 359 600 A (UEDA HIROMI ET AL) 25 October 1994 see claim 1	17

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

4 May 1999

Date of mailing of the international search report

12/05/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Veen, G

# INTERNATIONAL SEARCH REPORT

Information on patent family members

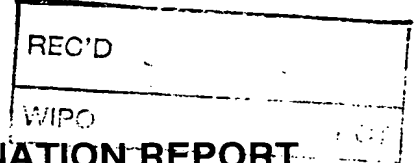
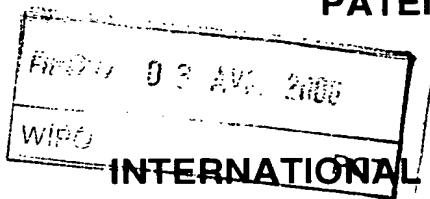
International Application No

PCT/IE 98/00103

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0614324 A	07-09-1994	JP 2087339 C	02-09-1996
		JP 6232893 A	19-08-1994
		JP 7107992 B	15-11-1995
		JP 2806726 B	30-09-1998
		JP 6232894 A	19-08-1994
		AU 667250 B	14-03-1996
		AU 5480894 A	04-08-1994
		CA 2114457 A,C	30-07-1994
		US 5412655 A	02-05-1995
US 5414707 A	09-05-1995	NONE	
US 5359600 A	25-10-1994	JP 5244187 A	21-09-1993

# PATENT COOPERATION TREATY

## PCT



### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference <b>TELL04/C/WO</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/IE98/00103</b>	International filing date (day/month/year) <b>15/12/1998</b>	Priority date (day/month/year) <b>15/12/1997</b>
International Patent Classification (IPC) or national classification and IPC <b>H04Q11/04</b>		
Applicant <b>TELLABS RESEARCH LIMITED et al.</b>		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
  - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand <b>02/06/1999</b>	Date of completion of this report <b>30.03.2000</b>
Name and mailing address of the international preliminary examining authority:  <b>European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</b>	Authorized officer <b>Teiwes, J</b>  Telephone No. +49 89 2399 7504 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IE98/00103

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

**Description, pages:**

1-12 as originally filed

**Claims, No.:**

1-19 as originally filed

**Drawings, sheets:**

1/5-5/5 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/IE98/00103

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	2,3,5-19
	No:	Claims	1,4
Inventive step (IS)	Yes:	Claims	2,3,5,6
	No:	Claims	1,4,7-19
Industrial applicability (IA)	Yes:	Claims	1-19
	No:	Claims	

### 2. Citations and explanations

**see separate sheet**

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 1 The following document will be referenced:

D1: EP-A-0 614 324 (NIPPON ELECTRIC CO) 7 September 1994

- 2 The present application does not meet the requirements of Articles 33(1) and (2) PCT, because the subject-matter of claim 1 is not novel.

- 2.1 The present broad formulation of independent method claim 1 is such that its subject matter can be read onto prior art document D1, which relates to a TDM/ATM assembly/disassembly system ie. a conversion system.

In particular, document D1 discloses a telecommunication system which comprises a TDM interface which comprises means for receiving (c.10, l.34-50; fig.9, obj.91, 93-97) and transmitting (c.6, l.48-55; fig.1, obj.2,8-11) TDM data streams. D1 further discloses a system packet communication interface comprising means for receiving (c.6, l.33-48; fig.1, obj.1,5-7) and transmitting (c.10, l.50-57; fig.9, obj.92, 98-99) data packet streams. D1 further discloses a format converter comprising means for performing bi-directional conversion between the TDM interface and the packet communication interface (c.6, l.42-55; fig.1, obj.1-4; c.10, l.44-57; fig.9, obj.91-94).

Consequently, the features of independent claim 1 are already known from D1.

- 2.2 It should be noted that even if claim 1 was interpreted in such a manner that its subject matter were novel, based on minor differences between the features of this claim and those disclosed in D1, the subject matter could still not involve an inventive step, Articles 33(1) and (3) PCT because D1 discloses the same object and the same type of solution with respect to the disclosure of claim 1.
- 2.3 The combination of the additional features of dependent claims 2, 3, 5 and 6 are not disclosed by the available prior art and include inventive subject matter. It should be, however, noted that claims 2, 3, 5 and 6 taken separately do not



contain all the technical features essential to the invention (see Item VIII.1).

- 2.4 The additional feature of dependent claim 4 is disclosed by D1 (fig.1, obj.4; fig.9, obj.94) and do therefore not add anything inventive to independent claim 1.
- 2.5 The additional features of dependent claims 7-16 are common design possibilities or are disclosed by the prior art and do therefore not add anything inventive to independent claim 1.
- 2.6 Claim 17 contains all the features of independent claim 1 and as a consequence it is a dependent claim, Rule 6.4(a) PCT. Claim 17 differs from independent system claim 1 in that it additionally mentions a format converter comprising a TDM bus connected to a TDM interface, an ATM bus connected to a ATM interface and at least one service-specific adaption module connected between the busses and a system controller.  
The difference features correspond to the already discussed features of dependent claims 2, 3, 4 and 7 (see para. 2.3, 2.4, 2.5).
- 2.7 The additional features of dependent claims 18 and 19 correspond to the already discussed features of dependent claims 5-8 (see para. 2.3, 2.4, 2.5).

#### **Re Item VII**

#### **Certain defects in the international application**

- 1 In order to meet the requirements of Rule 6.3(b) PCT the independent claim should have been cast in the two-part form, with those features which in combination are disclosed by document D1 being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
- 2 Reference signs placed in parentheses should have been inserted into all the claims to increase their intelligibility (Rule 6.2(b) PCT).

**Re Item VIII**

**Certain observations on the international application**

- 1 In view of the description (p.7, l.28 - p.8, l.4; p.8, l.12-19, l.23-29; fig. 1b), the components of the system mentioned there and their relationship indeed represent essential features to define the invention (An important aspect of the invention is the fact that the TDM and ATM interfaces each communicate their relevant signals within the system via a bus over format conversion units which may be service specific. The architecture allows multiple modules per service. The system controller directs control signals via the ATM bus for the ATM aggregate and for the service specific conversion units. The communication protocol is ATM. The system controller communicates with the TDM interfaces via a separate dedicated link.). None of these technical features are presented as optional anywhere in the description.  
Any claim which does not contain all these essential technical features, i.e. a combination of all the additional features defined in dependent claims 2, 3, 5 and 6, does not meet the clarity requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT.

**PCT**

**NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES**

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

O'BRIEN, John, A.  
John A. O'Brien & Associates  
Duncairn House, 3rd floor  
14 Carysfort Avenue  
Blackrock  
County Dublin  
IRLANDE

<b>Date of mailing (day/month/year)</b> 24 June 1999 (24.06.99)		<b>IMPORTANT NOTICE</b>	
<b>Applicant's or agent's file reference</b> TELL04/C/WO			
<b>International application No.</b> PCT/IE98/00103	<b>International filing date (day/month/year)</b> 15 December 1998 (15.12.98)	<b>Priority date (day/month/year)</b> 15 December 1997 (15.12.97)	
<b>Applicant</b> TELLABS RESEARCH LIMITED et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
 AU,CN,EP,IL,JP,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CU,CZ,DE,DK,EA,EE,ES,FI,GB,GD,GE,GH,GM,HR,HU,  
 ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,  
 SE,SG,SI,SK,SL,TJ,TM,TR,TT,UA,UG,UZ,VN,YU,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
 24 June 1999 (24.06.99) under No. WO 99/31927

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

02 JUL 1999

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<b>Authorized officer</b> <p style="text-align: center;">J. Zahra</p>
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

## Continuation of Form PCT/IB/308

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF  
THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

Date of mailing (day/month/year) 24 June 1999 (24.06.99)	IMPORTANT NOTICE
Applicant's or agent's file reference TELL04/C/WO	International application No. PCT/IE98/00103
<p>The applicant is hereby notified that, at the time of establishment of this Notice, the time limit under Rule 46.1 for making amendments under Article 19 has not yet expired and the International Bureau had received neither such amendments nor a declaration that the applicant does not wish to make amendments.</p>	

IPEA/ \_\_\_\_\_

# PCT

## CHAPTER II

### DEMAND

under Article 31 of the Patent Cooperation Treaty:  
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only	
Identification of IPEA	Date of receipt of DEMAND
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>	
Applicant's or agent's file reference TELL04/C/WO	
International application No. PCT/IE 98/00103	International filing date (day/month/year) 15 December 1998
(Earliest) Priority date (day/month/year) 15 December 1997	
Title of invention Telecommunication Systems	
<b>Box No. II APPLICANT(S)</b>	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
Tellabs Research Limited Shannon Industrial Estate Shannon County Clare Ireland	
Telephone No.:	
Facsimile No.:	
Teleprinter No.:	
State (that is, country) of nationality: IE	State (that is, country) of residence: IE
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
O'Brien, Raymond Sienna House Ardnacrusha County Clare Ireland	
State (that is, country) of nationality: IE	State (that is, country) of residence: IE
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
Melinn, Francis 26 Feamog 22 Purcell Park Shannon Shannon County Clare Ireland	
State (that is, country) of nationality: IE	State (that is, country) of residence: IE
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.	

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The following person is ☒ agent ☐ common representative  
 and ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.  
☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.  
☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*

O'Brien, John A and Weldon, Michael J.  
 c/o John A O'Brien & Associates  
 Third Floor  
 Duncairn House  
 14 Carysfort Avenue  
 Blackrock, County Dublin, Ireland

Telephone No.:

+ 353 1 2883877

Facsimile No.:

+ 353 1 2883878

Teleprinter No.:

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filed

the description

☐

as originally filed

☐

as amended under Article 34

the claims

☐

as originally filed

☐

as amended under Article 19 (together with any accompanying statement)

☐

as amended under Article 34

the drawings

☐

as originally filed

☐

as amended under Article 34

2. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.

3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: .....

☒ which is the language in which the international application was filed.

☐ which is the language of a translation furnished for the purposes of international search.

☐ which is the language of publication of the international application.

☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.

**Box No. V ELECTION OF STATES**

The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

**Box No. VI CHECK LIST**

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |  |   |        |
|--|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34   | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter  | : | sheets |
| 6. other (specify)   | : | sheets |

For International Preliminary Examining Authority use only

received                      not received

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify):  |

**Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

\_\_\_\_\_  
John A O'Brien

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>TELL04/C/WO</b>		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/IE98/00103</b>	International filing date (day/month/year) <b>15/12/1998</b>	Priority date (day/month/year) <b>15/12/1997</b>	
International Patent Classification (IPC) or national classification and IPC <b>H04Q11/04</b>			
Applicant <b>TELLABS RESEARCH LIMITED et al.</b>			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  <b>02/06/1999</b>	Date of completion of this report  <b>30.03.2000</b>
Name and mailing address of the international preliminary examining authority:   <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>	Authorized officer  <b>Teiwes, J</b>  <b>Telephone No. +49 89 2399 7504</b> 



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IE98/00103

**I. Basis of the report**

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

**Description, pages:**

1-12 as originally filed

**Claims, No.:**

1-19 as originally filed

**Drawings, sheets:**

1/5-5/5 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/IE98/00103

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	2,3,5-19
	No:	Claims	1,4
Inventive step (IS)	Yes:	Claims	2,3,5,6
	No:	Claims	1,4,7-19
Industrial applicability (IA)	Yes:	Claims	1-19
	No:	Claims	

**2. Citations and explanations**

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 1 The following document will be referenced:

D1: EP-A-0 614 324 (NIPPON ELECTRIC CO) 7 September 1994

- 2 The present application does not meet the requirements of Articles 33(1) and (2) PCT, because the subject-matter of claim 1 is not novel.

- 2.1 The present broad formulation of independent method claim 1 is such that its subject matter can be read onto prior art document D1, which relates to a TDM/ATM assembly/disassembly system ie. a conversion system.

In particular, document D1 discloses a telecommunication system which comprises a TDM interface which comprises means for receiving (c.10, l.34-50; fig.9, obj.91, 93-97) and transmitting (c.6, l.48-55; fig.1, obj.2,8-11) TDM data streams. D1 further discloses a system packet communication interface comprising means for receiving (c.6, l.33-48; fig.1, obj.1,5-7) and transmitting (c.10, l.50-57; fig.9, obj.92, 98-99) data packet streams. D1 further discloses a format converter comprising means for performing bi-directional conversion between the TDM interface and the packet communication interface (c.6, l.42-55; fig.1, obj.1-4; c.10, l.44-57; fig.9, obj.91-94).

Consequently, the features of independent claim 1 are already known from D1.

- 2.2 It should be noted that even if claim 1 was interpreted in such a manner that its subject matter were novel, based on minor differences between the features of this claim and those disclosed in D1, the subject matter could still not involve an inventive step, Articles 33(1) and (3) PCT because D1 discloses the same object and the same type of solution with respect to the disclosure of claim 1.
- 2.3 The combination of the additional features of dependent claims 2, 3, 5 and 6 are not disclosed by the available prior art and include inventive subject matter. It should be, however, noted that claims 2, 3, 5 and 6 taken separately do not

contain all the technical features essential to the invention (see Item VIII.1).

- 2.4 The additional feature of dependent claim 4 is disclosed by D1 (fig.1, obj.4; fig.9, obj.94) and do therefore not add anything inventive to independent claim 1.
- 2.5 The additional features of dependent claims 7-16 are common design possibilities or are disclosed by the prior art and do therefore not add anything inventive to independent claim 1.
- 2.6 Claim 17 contains all the features of independent claim 1 and as a consequence it is a dependent claim, Rule 6.4(a) PCT. Claim 17 differs from independent system claim 1 in that it additionally mentions a format converter comprising a TDM bus connected to a TDM interface, an ATM bus connected to a ATM interface and at least one service-specific adaption module connected between the busses and a system controller.  
The difference features correspond to the already discussed features of dependent claims 2, 3, 4 and 7 (see para. 2.3, 2.4, 2.5).
- 2.7 The additional features of dependent claims 18 and 19 correspond to the already discussed features of dependent claims 5-8 (see para. 2.3, 2.4, 2.5).

### **Re Item VII**

#### **Certain defects in the international application**

- 1 In order to meet the requirements of Rule 6.3(b) PCT the independent claim should have been cast in the two-part form, with those features which in combination are disclosed by document D1 being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
- 2 Reference signs placed in parentheses should have been inserted into all the claims to increase their intelligibility (Rule 6.2(b) PCT).

**Re Item VIII**

**Certain observations on the international application**

- 1 In view of the description (p.7, l.28 - p.8, l.4; p.8, l.12-19, l.23-29; fig. 1b), the components of the system mentioned there and their relationship indeed represent essential features to define the invention (An important aspect of the invention is the fact that the TDM and ATM interfaces each communicate their relevant signals within the system via a bus over format conversion units which may be service specific. The architecture allows multiple modules per service. The system controller directs control signals via the ATM bus for the ATM aggregate and for the service specific conversion units. The communication protocol is ATM. The system controller communicates with the TDM interfaces via a separate dedicated link.). None of these technical features are presented as optional anywhere in the description.

Any claim which does not contain all these essential technical features, i.e. a combination of all the additional features defined in dependent claims 2, 3, 5 and 6, does not meet the clarity requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT.

# PCT

## REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference

(if desired) (12 characters maximum)

TELL04/C/WO

### Box No. I TITLE OF INVENTION

"Telecommunication systems"

### Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

TELLABS RESEARCH LIMITED  
Shannon Industrial Estate  
Shannon  
County Clare  
Ireland

☐ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:

IE

State (that is, country) of residence:

IE

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

### Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

O'BRIEN, Raymond  
Sienna House  
Ardnacrusha  
County Clare  
Ireland

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

IE

State (that is, country) of residence:

IE

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☒ the United States of America only

☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

### Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

O'BRIEN, John A; WELDON, Michael J,  
c/o John A O'Brien & Associates,  
Third Floor, Duncairn House,  
14 Carysfort Avenue,  
Blackrock,  
County Dublin,  
Ireland

Telephone No.

+ 353 1 2883877

Facsimile No.

+ 353 1 2993878

Teleprinter No.

☐ Address for correspondence: Mark this check-box where no agent or common representative has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

*If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

MELINN, Francis  
26 Fearnog  
Shannon  
County Clare  
Ireland

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

IE

State (that is, country) of residence:

IE

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

Box No. V

## DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

## Regional Patent

- ☒ AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SZ Swaziland, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ EP European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

## National Patent (if other kind of protection or treatment desired, specify on dotted line):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> AL Albania                               | <input checked="" type="checkbox"/> LS Lesotho                                   |
| <input checked="" type="checkbox"/> AM Armenia                               | <input checked="" type="checkbox"/> LT Lithuania                                 |
| <input checked="" type="checkbox"/> AT Austria                               | <input checked="" type="checkbox"/> LU Luxembourg                                |
| <input checked="" type="checkbox"/> AU Australia                             | <input checked="" type="checkbox"/> LV Latvia                                    |
| <input checked="" type="checkbox"/> AZ Azerbaijan                            | <input checked="" type="checkbox"/> MD Republic of Moldova                       |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina                | <input checked="" type="checkbox"/> MG Madagascar                                |
| <input checked="" type="checkbox"/> BB Barbados                              | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia |
| <input checked="" type="checkbox"/> BG Bulgaria                              | <input checked="" type="checkbox"/> MN Mongolia                                  |
| <input checked="" type="checkbox"/> BR Brazil                                | <input checked="" type="checkbox"/> MW Malawi                                    |
| <input checked="" type="checkbox"/> BY Belarus                               | <input checked="" type="checkbox"/> MX Mexico                                    |
| <input checked="" type="checkbox"/> CA Canada                                | <input checked="" type="checkbox"/> NO Norway                                    |
| <input checked="" type="checkbox"/> CH and LI Switzerland and Liechtenstein  | <input checked="" type="checkbox"/> NZ New Zealand                               |
| <input checked="" type="checkbox"/> CN China                                 | <input checked="" type="checkbox"/> PL Poland                                    |
| <input checked="" type="checkbox"/> CU Cuba                                  | <input checked="" type="checkbox"/> PT Portugal                                  |
| <input checked="" type="checkbox"/> CZ Czech Republic                        | <input checked="" type="checkbox"/> RO Romania                                   |
| <input checked="" type="checkbox"/> DE Germany...and utility model...        | <input checked="" type="checkbox"/> RU Russian Federation                        |
| <input checked="" type="checkbox"/> DK Denmark...and utility model...        | <input checked="" type="checkbox"/> SD Sudan                                     |
| <input checked="" type="checkbox"/> EE Estonia                               | <input checked="" type="checkbox"/> SE Sweden                                    |
| <input checked="" type="checkbox"/> ES Spain                                 | <input checked="" type="checkbox"/> SG Singapore                                 |
| <input checked="" type="checkbox"/> FI Finland                               | <input checked="" type="checkbox"/> SI Slovenia                                  |
| <input checked="" type="checkbox"/> GB United Kingdom                        | <input checked="" type="checkbox"/> SK Slovakia                                  |
| <input checked="" type="checkbox"/> GE Georgia                               | <input checked="" type="checkbox"/> SL Sierra Leone                              |
| <input checked="" type="checkbox"/> GH Ghana                                 | <input checked="" type="checkbox"/> TJ Tajikistan                                |
| <input checked="" type="checkbox"/> GM Gambia                                | <input checked="" type="checkbox"/> TM Turkmenistan                              |
| <input checked="" type="checkbox"/> GW Guinea-Bissau                         | <input checked="" type="checkbox"/> TR Turkey                                    |
| <input checked="" type="checkbox"/> HR Croatia                               | <input checked="" type="checkbox"/> TT Trinidad and Tobago                       |
| <input checked="" type="checkbox"/> HU Hungary                               | <input checked="" type="checkbox"/> UA Ukraine                                   |
| <input checked="" type="checkbox"/> ID Indonesia                             | <input checked="" type="checkbox"/> UG Uganda                                    |
| <input checked="" type="checkbox"/> IL Israel                                | <input checked="" type="checkbox"/> US United States of America                  |
| <input checked="" type="checkbox"/> IS Iceland                               | <input checked="" type="checkbox"/> UZ Uzbekistan                                |
| <input checked="" type="checkbox"/> JP Japan                                 | <input checked="" type="checkbox"/> VN Viet Nam                                  |
| <input checked="" type="checkbox"/> KE Kenya                                 | <input checked="" type="checkbox"/> YU Yugoslavia                                |
| <input checked="" type="checkbox"/> KG Kyrgyzstan                            | <input checked="" type="checkbox"/> ZW Zimbabwe                                  |
| <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea |  |
| <input checked="" type="checkbox"/> KR Republic of Korea                     |  |
| <input checked="" type="checkbox"/> KZ Kazakhstan                            |  |
| <input checked="" type="checkbox"/> LC Saint Lucia                           |  |
| <input checked="" type="checkbox"/> LK Sri Lanka                             |  |
| <input checked="" type="checkbox"/> LR Liberia                               |  |

Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet:

- ☒ .. India
- ☒ .. Grenada

**Precautionary Designation Statement:** In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation of a designation consists of the filing of a notice specifying that designation and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.)



<b>Box No. VI PRIORITY CLAIM</b>		<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) 15/12/1997	97 0885	IE		
item (2) 31/08/1998	598 0709	IE		
item (3)				

☒ The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): 1, 2

\* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

**Choice of International Searching Authority (ISA)**  
(if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA /

**Request to use results of earlier search; reference to that search** (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

RS 99995.

**Box No. VIII CHECK LIST; LANGUAGE OF FILING**

This international application contains the following number of sheets:

request : 4

description (excluding sequence listing part) : 12

claims : 4

abstract : 1

drawings : 5

sequence listing part of description : 0

Total number of sheets : 26

This international application is accompanied by the item(s) marked below:

1. ☒ fee calculation sheet
2. ☒ separate signed power of attorney
3. ☒ copy of general power of attorney; reference number, if any:
4. ☐ statement explaining lack of signature
5. ☐ priority document(s) identified in Box No. VI as item(s):
6. ☐ translation of international application into (language):
7. ☐ separate indications concerning deposited microorganism or other biological material
8. ☐ nucleotide and/or amino acid sequence listing in computer readable form
9. ☐ other (specify):

**Figure of the drawings** which should accompany the abstract: 1(b)

**Language of filing of the international application:** English

**Box No. IX SIGNATURE OF APPLICANT OR AGENT**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

John O'Brien

For receiving Office use only		2. Drawings:  <input type="checkbox"/> received:  <input type="checkbox"/> not received:
1. Date of actual receipt of the purported international application:		
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		
4. Date of timely receipt of the required corrections under PCT Article 11(2):		
5. International Searching Authority (if two or more are competent): ISA /	6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.	

For International Bureau use only
Date of receipt of the record copy by the International Bureau:

## PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

O'BRIEN, John, A.  
John A O'Brien & Associates  
Duncairn House, 3rd floor  
14 Carysfort Avenue  
Blackrock  
County Dublin  
IRLANDE

Date of mailing (day/month/year) 11 February 1999 (11.02.99)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference TELL04/C/WO	
International application No. PCT/IE98/00103	International filing date (day/month/year) 15 December 1998 (15.12.98)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 15 December 1997 (15.12.97)
Applicant TELLABS RESEARCH LIMITED et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
15 Dec 1997 (15.12.97)	970885	IE	04 Febr 1999 (04.02.99)
31 Aug 1998 (31.08.98)	S980709	IE	02 Febr 1999 (02.02.99)

17 FEB 1999

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer  Marc Salzman  Telephone No. (41-22) 338.83.38
--	---

## PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

O'BRIEN, John, A.  
John A O'Brien & Associates  
Duncairn House, 3rd floor  
14 Carysfort Avenue  
Blackrock  
County Dublin  
IRLANDE

Date of mailing (day/month/year) 03 February 1999 (03.02.99)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference TELL04/C/WO	
International application No. PCT/IE98/00103	
International publication date (day/month/year) Not yet published	
Applicant TELLABS RESEARCH LIMITED et al	International filing date (day/month/year) 15 December 1998 (15.12.98)  Priority date (day/month/year) 15 December 1997 (15.12.97)

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
31 Augu 1998 (31.08.98)	S980709	IE	02 Febr 1999 (02.02.99)

05 FEB 1999

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer  V. Addor <i>V. Addor</i>  Telephone No. (41-22) 338.83.38
--	---

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Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

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- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
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